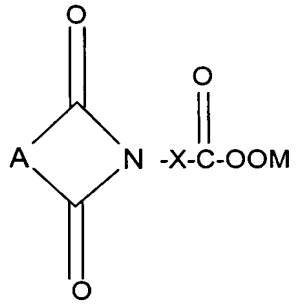
IN THE CLAIMS

Please amend the claims as follows:

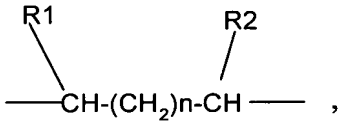
Claims 1-28 (Canceled).

Claim 29 (New): An imido-alkanpercarboxylic acid represented by formula (I):



formula (I)

wherein A is selected from the group consisting of :



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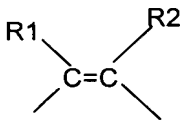

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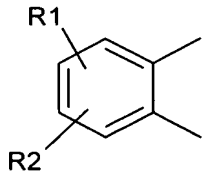

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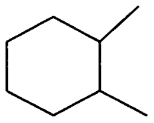

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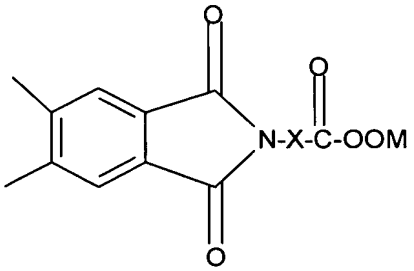
and



,

wherein:

n is 0, 1, or 2,

R1 is hydrogen, chlorine, bromine, C_1-C_{20} alkyl, C_2-C_{20} alkenyl, aryl, or alkylaryl,

R2 is hydrogen, chlorine, bromine, $-SO_3M$, $-CO_2M$, $-CO_3M$, or $-OSO_3M$,

M is hydrogen, an ammonium alkaline metal, or an alkaline-earth metal equivalent, and

X is a C_1-C_{19} alkylene or an arylene;

wherein said imido-alkanpercarboxylic acid is in a crystalline form of alpha that is stable at storage at the solid state, but when dispersed in water is capable of being transformed into one or more crystals of beta crystalline form that are stable in aqueous environment,

wherein said one or more crystals of beta crystalline form have an average size of lower than 30 microns,

and wherein the respective spectra of the alpha crystalline form obtained by X-ray Diffraction and Surface Infrared Spectroscopy techniques show, with respect to the spectra of the beta form of the same peracid, exhibit a different spectral X-ray image and a typical absorption shift in the 1697-1707 cm^{-1} zone by Surface Infrared Spectroscopy towards higher frequencies, of the order of 10 cm^{-1}.

Claim 30 (New): The imido-alkanpercarboxylic acid according to claim 29, wherein the acid is ε-phthalimido-peroxyhexanoic acid in alpha crystalline form, and has the following chemico-physical parameters :

X-ray spectrum showing peaks at $2\theta = 17.5°$ and 19.0° and quadruplet at $2\theta = 24.2°$ - 25.0°, and

Surface Infrared Spectroscopy spectrum showing a peak with maximum absorption in the 1707-1712 cm^{-1} zone, for an anhydrous crystal, having a water absorption at 3450-3500 cm^{-1} lower than 5 %.

Claim 31 (New): An imido-alkanpercarboxylic acid of beta crystalline form obtained by dispersing in water said imido-alkanpercarboxylic acid in a crystalline form of alpha according to claim 29 or claim 30, wherein said imido-alkanpercarboxylic acid of beta crystalline form is in the form of one or more particles having an average size of lower than 30 microns.

Claim 32 (New): A solid composition comprising said imido-alkanpercarboxylic acid in a crystalline form of alpha as claimed in claim 29 or 30.

Claim 33 (New): A composition comprising said imido-alkanpercarboxylic acid of beta crystalline form as claimed in claim 31.

Claim 34 (New): The composition according to claim 33 in an aqueous phase.

Claim 35 (New): The composition according to claim 33, wherein the content of said imido-alkanpercarboxylic acid of beta crystalline form is from 0.5 % to 25 % by weight based on the total weight of the composition.

Claim 36 (New): The composition according to claim 33 further comprising one or more suspending agents.

Claim 37 (New): The composition according to claim 36, wherein the amount of said one or more suspending agents, expressed in concentration by weight, is from 0.05 % to 0.6 %.

Claim 38 (New): The composition according to claim 37, wherein the amount of said suspending agent is from 0.05 % to 0.1 %.

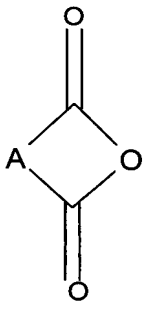
Claim 39 (New): The composition according to claim 33 further comprising one or more surfactants.

Claim 40 (New): The composition according to claim 39 further comprising hydrogen peroxide at concentrations by weight from 0 to 10 % based on the total weight of said composition.

Claim 41 (New): A process for the preparation of said imido-alkanpercarboxylic acid of claim 29, said process comprising:

I) peroxidating, in the presence of hydrogen peroxide and of a strong acid at a temperature of between 5° - 50°C, an imido-alkancarboxylic acid precursor obtained by reacting:

a) an anhydride represented by formula (II):

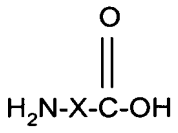


formula (II)

or the corresponding acid,

with

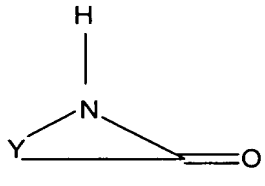
b1) an aminoacid represented by formula (III):



formula (III)

or

b2) a lactam represented by formula (IV):



formula (IV)

Y having the meanings of X; and

c) water;

at a temperature in the range 100°C-250°C, under pressure of an inert gas from 1 to 30 bar, for a reaction time of from 2 to 20 hours;

II) obtaining of a melted phase of eutectic composition of said imido-alkanpercarboxylic acid of formula (I) by heating a suspension in water of said imido-alkanpercarboxylic acid until the complete melting of the solid, said eutectic having a composition on a molar basis of no more than two moles of water/imido-alkanpercarboxylic acid;

III) separating said melted organic phase of eutectic composition from the aqueous phase in balance and recovering a melted organic phase comprising said imido-alkanpercarboxylic acid;

IV) quenching said melted organic phase to obtain said crystalline form of alpha, stable at the solid state.

Claim 42 (New): The process according to claim 41, wherein said quenching is carried out by dripping said melted organic phase of eutectic composition in liquid nitrogen.

Claim 43 (New): The process according to claim 41, wherein said quenching is carried out by dripping said melted organic phase of eutectic composition in cold water, under stirring, having a temperature lower than 15°C.

Claim 44 (New): The process according to claim 41, wherein said quenching is carried out by percolating said melted organic phase on a metal surface, or on two metal surfaces, coupled and cooled at temperatures lower than 30°C.

Claim 45 (New): The process according to claim 41, wherein in step I) the ratio by moles between a/(b1 or b2)/c is in the range 1/0.8:1.2/0.5:3.

Claim 46 (New): The process according to claim 41, wherein in step I) said anhydride a) or said corresponding acid is reacted with said lactam b2).

Claim 47 (New): The process according to claim 41, wherein said anhydride or said corresponding acid is selected from the group consisting of: succinic, glutaric, maleic, trimellitic, phthalic, pyromellitic, alkyl-succinic, and alkenyl-succinic anhydride.

Claim 48 (New): The process according to claim 41, wherein said amino acid is selected from the group consisting of: omega-aminobutyric, omega-aminovalerianic, omega-aminocaproic and omega-aminolauric acid.

Claim 49 (New): The process according to claim 41, wherein said lactam is selected from the group consisting of: gamma-pyrrolidone, delta-piperidone, epsilon-caprolactam, and omega-laurolactam.

Claim 50 (New): The process according to claim 41, wherein in step I) the temperature is in the range of 130°C-180°C and the pressure is in the range of 4-8 bar.

Claim 51 (New): The process according to claim 41, wherein said imido-alkanpercarboxylic acid is selected from the group consisting of phthalimido-peracetic acid, ε-phthalimido peroxyhexanoic acid, 3-phthalimido-perpropionic acid, 4-phthalimido-perbutyric acid, 2-phthalimido-diperglutaric acid, 2-phthalimido-dipersuccinic acid, 3-phthalimido-perbutyric acid, 2-phthalimido-perpropionic acid, 3-phthalimido-diperadipic acid, naphthalimido-peracetic acid, and 2-phthalimido-monopersuccinic acid.

Claim 52 (New): The process according to claim 41, wherein in step II) one or more sequestrants are added in the aqueous phase.

Claim 53 (New): A process to obtain an imido-alkanpercarboxylic acid of beta crystalline form, said process comprising:

suspending said imido-alkanpercarboxylic acid in the alpha form obtained according to the process of claim 41 in a stirred aqueous phase to obtain an aqueous suspension and

maintaining said aqueous suspension at a temperature from 0°C to 75°C, for a time ranging from 1 minute to 90 minutes.

Claim 54 (New): A bleach or a disinfectant comprising said imido-alkanpercarboxylic acid as claimed in claim 29 or claim 30.

Claim 55 (New): A bleach or a disinfectant comprising said imido-alkanpercarboxylic acid as claimed in claim 31.